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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/788,714  | 02/27/2004  | Jayasri Gunaratnam   | 0108-0253/2         | 6773             |
| 33787   | 7590        | 03/21/2006           | EXAMINER            |                  |
| JOHN J. OSKOREP, ESQ.<br>ONE MAGNIFICENT MILE CENTER<br>980 N. MICHIGAN AVE.<br>SUITE 1400<br>CHICAGO, IL 60611 |             |                      | CASCA, FRED A       |                  |
|   |             | ART UNIT             |                     | PAPER NUMBER     |
|   |             | 2617                 |                     |                  |
| DATE MAILED: 03/21/2006   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/788,714             | GUNARATNAM ET AL.   |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Fred A. Casca          | 2687                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 2/27/2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date. ____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### Claim Objections

1. Claim 23 is objected because it requires the word, "wherein", on line 1. Please insert the word, "wherein", before the phrase, "the acts of scanning", in line one of claim 23.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 5-8, 11-14, 17-22, and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Johannesson et al (WO 02/069661 A2).

Referring to claim 1, Johannesson discloses a method of selecting a communication network by a mobile station associated with a home communication network having a home mobile country code (MCC) (page 2, lines 14-28, and page 4, lines 14-20), the method comprising:

selecting and operating with a non-home communication network having a visiting MCC (Figures 3-4, and page 5, lines 4-25, "select a better PLMN", "MCC list", "PLMNs within other countries");

after expiration of a timer (page 6, lines, 27-29, "the search could be initiated by a timer", note that a timer is used and inherently timers allow a particular action after an expiration period);

scanning to identify a plurality of communication networks in a coverage area within which the mobile station is operating (page 4, lines 4-21, “scan and search for a better PLMN”); if the home communication network having the home MCC is identified as being available by the scanning, selecting and operating with the home communication network (Figure 4, and page 6, lines 18-30, “once the preferred PLMN is found, the mobile station changes to the preferred PLMN at step 70”, note that once a preferred public land mobile network of the mobile station 10, e.g., a home PLMN associated with one of the provided mobile country codes is identified, the mobile station searches for the home PLMN by scanning for the PLMN, and selects and operates with the home communication network (HPLMN)), and otherwise, if the non-home communication network having the visiting MCC is identified as being available by the scanning, selecting and operating with the non-home communication network (figures 4-5, page 6, line 18 through page 7, line 16, note that in the three PLMN of figure 5, the mobile station is moving away from its HPLMN and approaching a non-home PLMN (PLMN B), and once the mobile station enters a coverage area outside the its HPLMN, then it selects a non-home PLMN (PLMN B), and later when the home PLMN becomes available, it selects the home-PLMN. Further note that non-home network having the visiting MCC is inherently identified by the scanning as described on page 6 (mobile station receives at step 55 the mobile country codes of neighboring countries).

Referring to claim 2, Johannesson discloses the method of claim 1, wherein the home MCC is associated with a first country and the visiting MCC is associated with a second country which shares a border with the first country (Figures 1 and 5, and page 2, lines 1-10).

Referring to claim 5, Johannesson discloses the method of claim 1, wherein the communication networks comprise Public Land Mobile Networks (PLMNs) (Figures 1-5, and page 2, lines 18-28).

Referring to claim 6, Johannesson discloses the method of claim 1, wherein the communication networks are operative in accordance with Global Systems for Mobile Communications (GSM) (page 3, lines 20-30).

Referring to claim 7, Johannesson discloses a mobile station associated with a home communication network having a home Mobile Country Code (MCC) (page 2, lines 14-28, and page 4, lines 14-20), the mobile station comprising a wireless transceiver, an antenna coupled to the wireless transceiver, one or more processors coupled to the wireless transceiver (figure 2, page 2, lines 18-28, page 6, lines 18-31, “control logic”, “mobile station receives”, note the mobile station communicate through a wireless network, hence it comprises a wireless transceiver, an antenna coupled to the wireless transceiver, one or more processors coupled to the wireless transceiver so that selection process is taken place according to the decisions outlined by the processor); said one or more processors being configured to select a communication network through which to communicate by (Figures 3-4, and page 5, lines 4-25, page 6, lines 18-31, “Control logic . . . the mobile station change to the preferred PLMN”);

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selecting and operating with a non-home communication network having a visiting MCC (figures 4-5, page 6, line 18 through page 7, line 16, note that in the three PLMN of figure 5, the mobile station is moving away from its HPLMN and approaching a non-home PLMN (PLMN B), and once the mobile station enters a coverage area outside the its HPLMN, then it selects a non-home PLMN (PLMN B);

after expiration of a timer (page 6, lines, 27-29, “the search could be initialed by a timer”, note that a timer is used and inherently timers allow a particular action after an expiration period); scanning to identify a plurality of communication networks in a coverage area within which the mobile station is operating (page 4, lines 4-21, “scan and search for a better PLMN”);

if the home communication network having the home MCC is identified as being available by the scanning, selecting and operating with the home communication network (Figure 4, and page 6, lines 18-30, “once the preferred PLMN is found, the mobile station changes to the preferred PLMN at step 70”, note that once a preferred public land mobile network of the mobile station 10, e.g., a home PLMN associated with one of the provided mobile country codes is identified, the mobile station searches for the home PLMN by scanning for the PLMN, and selects and operates with the home communication network (HPLMN)); and

otherwise, if the non-home communication network having the visiting MCC is identified as being available by the scanning selecting and operating with the non-home communication network (figures 4-5, page 6, line 18 through page 7, line 16, note that in the three PLMN of figure 5, the mobile station is moving away from its HPLMN and approaching a non-home PLMN (PLMN B), and once the mobile station enters a coverage area outside the its HPLMN, then it selects a non-home PLMN (PLMN B), and later when the home PLMN becomes

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available, it selects the home-PLMN. Further note that non-home network having the visiting MCC is inherently identified by the scanning as described on page 6 (mobile station receives at step 55 the mobile country codes of neighboring countries)).

Referring to claim 8, Johannesson discloses The mobile station of claim 7, wherein the home MCC is associated with a first country and the visiting MCC is associated with a second country which shares a border with the first country (Figures 1 and 5, and page 2, lines 1-10).

Referring to claim 11, Johannesson discloses the mobile station of claim 7, wherein the communication networks comprise Public Land Mobile Networks (PLMNs) (Figures 1-5, and page 2, lines 18-28).

Referring to claim 12, Johannesson discloses the mobile station of claim 7, wherein the communication networks are operative in accordance with Global Systems for Mobile Communications (GSM) (page 3, lines 20-30).

Referring to claim 13, Johannesson discloses a communication system (Figures 1-5, and Abstract) comprising a first communication network having a first Mobile Country Code (MCC) associated with a first country, a second communication network having a second MCC associated with a second country (Figures 1-5, page 2, lines 5-10, page 4, lines 14-31, and page 7, lines 5-16, note that the border of a country inherently comprises two counties where the first PLMN serves the first country and the another PLMN serves the second country. Further note

that networks selection of a PLMN includes mobile county code, hence the first network has first MCC, and the second network has a second MCC); one or more mobile stations which are operable with the first and the second communication networks (Figures 1-2, and page 3, line 21 through page 4, line 12, mobile station 10”); the one or more mobile stations having the first communication network designated as its home communication network (Figures 1-2, and 5, and page 4, lines 4-31, and page 7, lines 5-16, ); the one or more mobile stations being operative to select and operate with the second communication network having the second MCC (Figures 3-5, page 7, lines 5-16, page 4, lines 4-21, and page 5, lines 4-25, “scan and search for a better PLMN”, “select a better PLMN”, “MCC list”, “PLMNs within other countries” ); after expiration of a timer (page 6, lines, 27-29, “the search could be initiated by a timer”, note that a timer is used and inherently timers allow a particular action after an expiration period), scan to identify a plurality of communication networks in a coverage area within which the mobile station is operating (page 4, lines 4-21, “scan and search for a better PLMN”); if the first communication network having the first MCC is identified as being available by the scanning, select and operate with the first communication network (Figure 4, and page 6, lines 18-30, “once the preferred PLMN is found, the mobile station changes to the preferred PLMN at step 70”, note that once a preferred public land mobile network of the mobile station 10, e.g., a home PLMN associated with one of the provided mobile country codes is identified, the mobile station searches for the home PLMN by scanning for the PLMN, and selects and operates with the home communication network (HPLMN)); and

otherwise, if the second communication network having the second MCC is identified as being available by the scan, select and operate with the second communication network (figures 4-5, page 6, line 18 through page 7, line 16, note that in the three PLMN of figure 5, the mobile station is moving away from its HPLMN and approaching a non-home PLMN (PLMN B), and once the mobile station enters a coverage area outside the its HPLMN, then it selects a non-home PLMN (PLMN B), and later when the home PLMN becomes available, it selects the home-PLMN. Further note that non-home network having the visiting MCC is inherently identified by the scanning as described on page 6 (mobile station receives at step 55 the mobile country codes of neighboring countries)).

Referring to claim 14, Johannesson discloses the communication system of claim 13, wherein the first country shares a common border with the second country (Figures 1 and 5, and page 2, lines 1-10).

Referring to claim 17, Johannesson discloses the communication system of claim 13, wherein the communication networks comprise Public Land Mobile Networks (PLMNs) (Figures 1-5, and page 2, lines 18-28).

Referring to claim 18, Johannesson discloses the communication system of claim 13, wherein the communication networks are operative in accordance with Global Systems for Mobile Communications (GSM) (page 3, lines 20-30).

Referring to claim 19, Johannesson discloses a method of selecting a communication network by a mobile station associated with a home communication network having a home mobile country code (MCC) (page 2, lines 14-28, and page 4, lines 14-20), the method comprising:

selecting and operating with a non-home communication network having a visiting MCC (Figures 3-4, and page 5, lines 4-25, “select a better PLMN”, “MCC list”, “PLMNs within other countries”);

scanning to identify a plurality of communication networks in a coverage area within which the mobile station is operating (page 4, lines 4-21, “scan and search for a better PLMN”); and

if the home communication network having the home MCC is identified as being available by the scanning, selecting and operating with the home communication network (Figure 4, and page 6, lines 18-30, “once the preferred PLMN is found, the mobile station changes to the preferred PLMN at step 70”, note that once a preferred public land mobile network of the mobile station 10, e.g., a home PLMN associated with one of the provided mobile country codes is identified, the mobile station searches for the home PLMN by scanning for the PLMN, and selects and operates with the home communication network (HPLMN)).

Referring to claim 20, Johannesson discloses the method of claim 19, further comprising otherwise, if the non-home communication network having the visiting MCC is identified as being available by the scanning selecting and operating with the non-home communication network (figures 4-5, page 6, line 18 through page 7, line 16, note that in the three PLMN of figure 5, the mobile station is moving away from its HPLMN and approaching a non-home

PLMN (PLMN B), and once the mobile station enters a coverage area outside the its HPLMN, then it selects a non-home PLMN (PLMN B), and later when the home PLMN becomes available, it selects the home-PLMN. Further note that non-home network having the visiting MCC is inherently identified by the scanning as described on page 6 (mobile station receives at step 55 the mobile country codes of neighboring countries)).

Referring to claim 21, Johannesson discloses the method of claim 19, wherein the home MCC is associated with a first country and the visiting MCC is associated with a second country which shares a border with the first country (Figures 1 and 5, and page 2, lines 1-10).

Referring to claim 22, Johannesson discloses the method of claim 19, wherein the act of scanning is performed after expiration of a timer (page 6, lines, 27-29, “the search could be initiated by a timer”, note that a timer is used and inherently timers allow a particular action after an expiration period).

Referring to claim 24, Johannesson discloses the method of claim 19, wherein the communication networks comprise Public Land Mobile Networks (PLMNs) (Figures 1-5, and page 2, lines 18-28).

Referring to claim 25, Johannesson discloses the method of claim 19, wherein the communication networks are operative in accordance with Global Systems for Mobile Communications (GSM) (page 3, lines 20-30).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4, 9-10, 15-16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johannesson et al (WO 02/069661 A2), in view of well known prior art (MPEP 2144.03).

Referring to claims 3, 9, and 15 and Johannesson discloses the method, mobile station and system of claims 1, 7, and 13.

Johannesson does not specifically disclose the timer comprises a periodic timer.

The examiner takes official notice of the fact that periodic timers are well known in the art.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to incorporate the teachings of what is well known in the art into that of the method, mobile station and system of Johannesson by providing a periodic timer to allow scanning and identifying after the expiration of the periodic timer, and consequently providing automatic periodic scanning and searching.

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Referring to claims 4, 10, and 16 Johannesson discloses the method, mobile station and system of claims 1, 7, and 13, wherein the acts of scanning, selecting and operating are performed in response to expirations of the timer.

Johannesson does not specifically disclose the timer comprises a periodic timer and the acts of scanning, selecting and operating are performed in response to expirations of the periodic timer.

The examiner takes official notice of the fact that periodic timers are well known in the art.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to incorporate the teachings of what is well known in the art into that of the method, mobile station and system of Johannesson by providing a periodic timer into the method, station and system of Johannesson and consequently allowing scanning and identifying after the expiration of the periodic timer, and consequently providing automatic periodic scanning and searching.

Referring to claim 23, Johannesson discloses the method of claim 19.

Johannesson does not specifically disclose the acts of scanning selecting and operating are performed in response to expirations of a **periodic** timer.

The examiner takes official notice of the fact that periodic timers are well known in the art.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to incorporate the teachings of what is well known in the art into that of the method of

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Johannesson by providing a periodic timer into the method of Johannesson and consequently allowing scanning and identifying after the expiration of the periodic timer, and consequently providing automatic periodic scanning and searching.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Park et al., U.S. Patent. No. 6992993 B1, discloses a method for cell selection of mobile telephone apparatus.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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